

- M. chloroplax*, B. M.*
M. Jacquemonti v. Mart. M.*
Bensonia monticola, Hutton T. M. H.
Microcystis Nevillianus, Theob. T.
Trochomorpha Tandianensis, Theob. T.
Kaliella fastigiata, Hutton T. M.
Vallonia humilis, Hutton T. M.
Anadenus altivagus, Theob. T. M.
Napæus domina, B. M. H.
N. Beddomeanus, Nev. T. M.
N. Mainwaringianus, Nev. T. M.*
N. Smithei, B. M.
Peronæus Nevillianus, Theob. T.
Clausilia Waageni, Stol. T. M.
C. cylindrica, Gray T. M.

IV.—*A list of BUTTERFLIES taken in Sikkim in October, 1880, with notes on habits, &c.*—By LIONEL DE NICEVILLE.

[Received December 12th, 1880; Read 6th April, 1881.]

PART I.

Insects taken on the road between Siligori, elevation 397 feet above the sea, and Chunabatti, 2,260 feet.

1. *Danaïs melaneus*, Cramer.
Common in the Terai and the wooded slopes below Chunabatti.
2. *Danaïs aglea*, Cramer.
Lower hills.
3. *Danaïs septentrionis*, Butler.
One male on lower hills.
4. *Danaïs chrysippus*, Linnæus.
Common in the open between Siligori and the Terai forest-belt.
5. *Danaïs plexippus*, Linnæus.
Common in the Terai.
6. *Euplæa (Trepisichrois) midamus*, Linnæus.
Males only observed in the Terai.
7. *Euplæa core*, Cramer.
Both sexes very common in the Terai.
8. *Lethe rohria*, Fabricius.
Very common on the road through the Terai.
9. *Lethe europa*, Fabricius.
Only one male seen in the Terai.

10. *Mycalesis perseus*, var. *visala*, Moore.

Common amongst grass and bushes.

11. *Mycalesis malsara*, Moore.

Common, settles on the road in damp places.

12. *Ypthima philomela*, Johanssen.

Frequents grass and herbage, where I found it common.

13. *Acræa vesta*, Fabricius.

Excessively common. It has a weak flight, continually settling with closed wings on a flower or the end of a branch.

14. *Cethosia biblis*, Drury.

Common all through the Terai and up to Chunabatti. The rich red of its upper surface with a lovely violet reflection makes this species one of the handsomest insects on the wing I know.

15. *Cirrhochroa aoris*, Doubl. Hew.

Not uncommon: it has a quick flight, and very much resembles an *Argynnis* on the wing.

16. *Cirrhochroa mithila*, Moore.

Rarer than *C. aoris*, and only seen in the Terai.

17. *Cynthia erota*, Fabricius.

Two males only taken just above the Terai. This species has a very bold, strong flight.

18. *Symbrenthia hypoclus*, Cramer.

Two specimens taken near Chunabatti.

19. *Pyrameis indica*, Herbst.

Flying in numbers round the Chunabatti Dāk Bungalow.

20. *Junonia lemonias*, Linnæus.

Common.

21. *Junonia laomedea*, Linnæus.

Seen only in the Terai.

22. *Junonia iphita*, Cramer.

Only one specimen taken.

23. *Ergolis ariadne*, Linnæus.

Common everywhere in the lower hills and plains.

24. *Cyrestis thyodamas*, Boisduval.

One male only taken. It settled as is usual with this species with its wings wide expanded and touching the ground all round at the edges, the fore-wing being much pushed forward, leaving quite a large space between it and the hind-wing.

25. *Hestina nama*, Doubleday.

Males only taken on the lower hills. On the wing it much resembles *Danaïs tytia*.

26. *Euripus halitherses*, Doubl. Hew.

I only saw two females of this species, and mistook them for *Euplœa* (*Salpinx*) *rhadamanthus* which they evidently mimic, not only in form and coloration but also in the slow flapping flight and the habit of settling in open places so characteristic of *Euplœas*.

27. *Limenitis procris*, Cramer.

One only taken in the Terai. It is a high soaring insect, settling often on the outer leaves of the boughs of trees. If disturbed it always returns to the same spot from whence it is driven off.

28. *Neptis hordonia*, Stoll.

Common in the Terai.

29. *Neptis viraja*, Moore.

One female only taken in the Terai.

30. *Neptis aceris*, Lepechin.

Common in the Terai.

31. *Neptis emodes*, Moore.

One specimen only taken.

32. *Neptis cartica*, Moore.

Both sexes taken in the Terai.

33. *Neptis susruta*, Moore.

Two males taken in the Terai.

34. *Athyma leucothoë*, Linnæus.

A single male in the Terai.

35. *Athyma selenophora*, Kollar.

Males common in the Terai.

36. *Athyma inara*, Doubl. Hew.

Seen only in the Terai. The males of this genus are especially partial to settling on damp spots to suck up the moisture.

37. *Apatura parysatis*, Westwood.

Males common along the road below Chunabatti.

38. *Nymphalis athamas*, Drury.

A fine male of the pale greenish-white (almost pure white) variety taken just above the Terai.

39. *Zemeros flegyas*, Cramer.

Very common all along the road through the lower hills.

40. *Polyommatus sangra*, Moore.

The commonest "Blue" amongst the grass in the Terai and toward Siligori.

41. *Lampides ardates*, Moore.

Very common everywhere, settled on damp spots.

42. *Lampides rosimon*, Fabricius.

Also common.

43. *Lampides ælianus*, Fabricius.

A single male taken in the Terai.

44. *Lampides elpis*, Godart.

A Terai insect. On the wing it presents a very curious appearance on account of its alternately completely opening and shutting its wings, the contrast between the brilliant metallic-blue of the upper surface and the dark dull underside being very great.

45. *Lampides pusa*, Horsfield.

Common throughout the Sikkim hills. This species seems to take the place of *L. kashmira*, the commonest "Blue" in the North-West Himalayas, which is apparently not found much further west than Kumaon.

46. *Lampides kandarpa*, Horsfield.

A single specimen only taken in the Terai.

47. *Ilerda epicles*, Godart.

Common in the Terai and lower hills. The genus to which this species belongs is one that is essentially a frequenter of rank herbage, being always commonest where the ground has been disturbed by man, and weeds have sprung up.

48. *Hypolycæna erylus*, Godart.

Males very common all through the Terai and up to Chunabatti. Only one female taken.

49. *Pseudodipsas bengalensis*, Moore.

Common, settled on moist places on the road.

50. *Curetis bulis*, Doubl. Hew.

Males common in the Terai, settled on the road.

51. *Surendra quercetorum*, Moore.

One female taken in the Terai.

52. *Terais hecabe*, Linnæus.

Common between Siligori and the Terai.

53. *Pieris nerissa*, Fabricius.

Papilio amasene, Cramer, pl. 44, A.

A single specimen of this apparently very variable Pierid taken in the Terai. The Sikkim specimens are always much larger than those from other parts of India.

54. *Appias hippo*, Cramer.

Common near Chunabatti.

55. *Tachyris indra*, Moore.

A few males seen near Chunabatti.

56. *Catopsilia pyranthe*, Linnæus.

Common in the Terai and towards Siligori.

57. *Hebomoia glaucippe*, Linnæus.

A single male seen near Chunabatti. It has a very rapid flight; when

settling on a flower it is very inconspicuous, the mottled hind-wing and the apex of the fore-wing which is also much mottled and which alone is left uncovered by the hind-wing, render it difficult to see on account of its close resemblance to a dead leaf.

58. *Ixias evippe*, Drury.

Very common near Chunabatti. This species has a very rapid, strong flight, but continually settles.

59. ? *Ornithoptera pompeus*, Cramer.

Three specimens seen, sailing high amongst the trees.

60. *Pupilio helenus*, Linnæus.

Not uncommon in the lower hills.

61. *Papilio polytes*, Linnæus.

One or two seen in the Terai.

62. *Papilio androgeus*, Cramer.

A female, second form, taken just above the Terai, where the road commences to ascend the hills.

63. *Papilio aristolochiæ*, Fabricius.

I took several battered specimens in the Terai.

64. *Papilio philoxenus*, Westwood.

Not uncommon near Chunabatti. I took several specimens, but all except one, a female with an expanse of 5·9 inches, were much broken. It sails about in the open, often high up amongst the trees, and apparently quite safe from the attack of birds, its strong scent, perceptible a couple of yards off even now, three months after it was caught, being probably most distasteful to insectivorous birds.

PART II.

Butterflies taken on the road between Chunabatti, 2,260 feet, and Kurseong, 4,840 feet.

(1.) *Danaïs melaneus*.

Common just above Chunabatti.

(2.) *Danaïs aglea*.

One only taken.

(8.) *Lethe rohria*.

Common along the road.

(11.) *Mycalopsis malsara*.

One male only taken.

65. *Mycalopsis gopa*, Felder.

A single male. This species is new to the Museum collection.

66. *Ypthima sakra*, Moore.

Common by the roadside.

67. *Ypthima nareda*, Hewitson.

Less common than the preceding.

(13.) *Acræa vesta*.

The larvæ and pupæ of this insect covered the weeds all along the roadside. In the North-West Himalayas it is a local and rare species, in Sikkim it is the commonest butterfly seen.

(14.) *Cethosia biblis*.

Many seen.

68. *Cethosia cyane*, Drury.

A much rarer insect than the preceding, a few specimens only seen.

(18.) *Symbrenthia hyppoclus*.

One only taken. It is a very rapid flyer for so small an insect, but it frequently settles.

69. *Junonia asterie*, Linnæus.70. *Precis veda*, Kollar.

A water-loving insect, I have never taken it except in beds of streams, up and down which it flies keeping to a regular beat, and occasionally settling on a leaf, darting off in pursuit of any intruder venturing near, only to return to the same resting place. It is a wary insect and not easy to capture unless waited for in the line of its flight when a quick stroke of the net may secure it.

(25.) *Hestina nama*.

Males only met with commonly.

(39.) *Zemeros flegyas*.

Very common, settled on the road and pathways.

(41.) *Lampides ardates*.(45.) *Lampides puspā*.

All the females that I have seen of this species have been smaller than the males.

(54.) *Appias hippo*.

Both sexes seen, males common. The intensity of the crome-yellow apical spot on fore-wing and the ground-colour of the hind-wing seems variable, some specimens being much darker than others.

71. *Pieris canidia*, Sparrman.

Common near Kurseong.

(57.) *Hebomoia glaucippe*.

An occasional one seen.

72. *Hesperia eltola*, Hewitson.

One specimen only.

73. *Satarupa bhagava*, Moore.

One taken near Chunabatti.

 PART III.

Butterflies taken on the road between Kurseong, 4,840 feet, and Darjiling, 6,885 feet.

On both occasions, both going to and returning from Darjiling, I had no sunshine when traversing this piece of road, which accounts for the small number of Butterflies observed.

74. *Lethe sidonis*, Hewitson.

Males excessively common all along the road from about 5 miles above Kurseong to Darjiling. I only took one female, it hardly differs from the opposite sex.

(66.) *Yphthima sakra*.

A few specimens seen.

75. *Limenitis daraxa*, Doubl. Hew.

Only two specimens seen. It is a very pretty insect on the wing, very rapid in its movements. It always settles with its wings wide outspread.

(45.) *Lampides puspa*.

Not uncommon, settled on the road in moist places.

76. *Ilerda androcles*, Doubl. Hew.

Three males taken, many others seen.

PART IV.

The Butterflies enumerated in this part were taken on the road between Darjiling and the Badamtan Tea Estate; the greater portion between elevations of from 5,000 down to 3,500 feet.

(3.) *Danaïs septentrionis*.

Very common at the lower elevation.

(6.) *Euplœa (Trepseichrois) midamus*.

Many specimens of both sexes on flowers in the garden at Badamtan.

77. *Lethe kansa*, Moore.

A single male.

(10.) *Mycalæris perseus* var. *visala*.

Common along the pathways.

(14.) *Cethosia biblis*.

Both sexes very common.

78. *Neptis amba*, Moore.

A single male.

(38.) *Nymphalis athamas*.

A single male of the green variety.

79. *Abisara fylla*, Doubl. Hew.

A fine male of this rare species.

80. *Dodona ouida*, Moore.

One male.

(49.) *Pseudodipsas bengalensis*.

Common, only males observed.

81. *Pieris nadina*, Lucas.

One female. A most rapid insect on the wing, reminding one much more of a *Tuchyris* than a *Pieris*.

82. *Papilio paris*, Linnæus.

I took several males hovering over moist spots on the bank of a rivulet which crosses the road near Badamtan.

PART V.

All the Butterflies referred to in this last part were obtained in the valley of the Great Runjeet, at an average elevation of about 1,000 feet only. The road follows the course of the river, and passes through a magnificent forest with an almost impenetrable undergrowth of bamboo, rattan-cane, &c. The road is often crossed by small streams of water running into the Runjeet, and it was on the moist ground bordering these streams that I took most of the butterflies mentioned below. In places they were so abundant that when approached, they actually rose like a cloud presenting the most varied colours, forms and sizes. All along the road, however, butterflies were in wonderful profusion, never in my life before have I seen such numbers together belonging to so many species.

83. *Lethe chandica*, Moore.

Males common.

84. *Lethe mekara*, Moore.

Males settled on damp spots on the road.

(8.) *Lethe rolria*.

This appears to be the commonest *Lethe* in Sikkim.

85. *Neope bhadra*, Moore.

I found this most beautiful Satirid very common all along the road, settled with closed wings in damp places. On being disturbed it immediately flies off into the jungle, where, settled amongst dead leaves it is completely hidden.

(10.) *Mycalesis perseus* var. *visala*.

Males plentiful as usual.

(11.) *Mycalesis malsara*.

Also common.

86. *Mycalesis anaxias*, Hewitson.

A single male taken.

(12.) *Ypthima philomela*.

Common amongst the grass.

87. *Zipaetis scylax*, Hewitson.

Common. It has the habits of a *Mycalesis*.

88. *Elymnias undularis*, Drury.

A few males only seen.

89. *Dyctis patna*, Westwood.

A single male which I thought was a specimen of *Euplœa* (*Trepsichrois*) *midamus* (an insect I did not see at all in the Runjeet valley) when on the wing and captured as such, so admirably does this insect "mimic" the *Euplœa*.

90. *Discophora celinde*, Stoll.

Males common all along the road settled with closed wings on damp spots. When they fly they are particularly handsome, the deep indigo-blue of their uppersides glistening beautifully in the sun-light.

91. *Thaumantis diores*, Doubleday.

A single specimen seen of this lovely insect.

(14.) *Cethosia biblis*.

Common.

92. *Kallima inachis*, Boisduval.

Three seen, one settled on a damp spot, the other two flying along the road and occasionally turning off at right angles to it to settle with closed wings and *head downwards* on a stem of bamboo, where of course their close similitude to a dead leaf rendered their detection, unless the actual spot where they settled was marked, almost an impossibility. Their suddenly turning off to settle at right angles to their line of flight is a characteristic I have observed in no other butterfly.

(23.) *Ergolis ariadne*.

Common as usual.

(24.) *Cyrestis thyodamas*.

Not very common.

93. *Cyrestis risa*, Doubl. Hew.

Very common. This species as well as *C. thyodamas* has the habit of suddenly settling, with wings wide outspread, on the *underside* of a leaf parallel to the ground, where it is completely hidden. This feat of gymnastics is confined to this genus alone as far as my experience goes and must be a great protection to it from its enemies, the disappearance of the insect is so rapid that unless one has actually watched it settle on the leaf it seems like magic.

94. *Stibochiona nicea*, Gray.

Very common. It has a bold flight, is very pugnaceous, and always settles with expanded wings on a leaf or similar resting-place only to soar off in pursuit of the first intruder venturing near. It always returns to the same spot.

(25.) *Hestina nama*.

Males common.

(26.) *Euripus halitherses*.

Males only seen. It has a rapid flight, and never settles with expanded wings in conspicuous places as the female does.

95. *Lebadea ismene*, Doubl. Hew.

Common. It has a somewhat weak flight.

- (28.) *Neptis hordonia*.

Common.

- (31.) *Neptis emodes*.

Common.

- (33.) *Neptis susruta*.

One male only taken.

96. *Athyma mahesa*, Moore.

A single pair taken.

- (35.) *Athyma selenophora*.

Common.

97. *Adolias kesava*, Moore.

One male.

98. *Adolias sananda*, Moore.

A single male.

99. *Adolias apiades*, Ménétriés.

Both sexes very common. They usually settle with expanded wings like the rest of the genus, but not invariably as some genera (*Cyrestis Shibochiona*, &c.,) do.

- (37.) *Apatura parysatis*, Westwood.

The females are evidently very sluggish, out of dozens of males I did not see one female.

- (38.) *Nymphalis athamas*.

Green variety common.

100. *Nymphalis polyxena*, Cramer.

A single specimen of one of the numerous varieties (? species) of this insect.

- (39.) *Zemeros flegyas*.

Common.

101. *Lampides malaya*, Horsfield.

Common, settled on moist places. The specimens differ in some minute particulars from the Javan ones described by Horsfield.

102. *Lampides decidia*, Hewitson.

Decidedly common.

103. *Lampides parrhasius*, Fabricius.

One male.

- (44.) *Lampides elpis*.

Apparently confined to low elevations.

104. *Aphnæus syama*, Horsfield.

One female only seen. The whole of the species in this genus fly with the greatest rapidity.

- (47.) *Ilerda epicles*, Godart.

Common.

105. *Hypolycæna etolus*, Fabricius.

Very common. It is a rapid flyer, and on the wing at once reminded me of one of the common blue-bodied Dragon-flies which abound everywhere near water. Is it possible that a butterfly has "mimiced" a *Libellula*?

106. *Deudorix petosiris*, Hewitson.

One male of this somewhat rare species.

- (50.) *Curetis bulis*.

Common.

107. *Arhopala centaurus*, Fabricius.

One male taken.

108. *Pontia xiphia*, Fabricius.

I met with many specimens of this pretty, weak-flying species.

- (81.) *Pieris nadina*.

One male.

109. *Delias pasithoë*, Linnæus.

Two specimens only of this rich-coloured species.

110. *Delias agostina*, Hewitson.

Two male specimens, both settled on damp spots.

111. *Eronia avatar*, Moore.

One very fine male.

- (56.) *Catopsilia pyranthe*.

Common.

112. *Papilio astorion*, Westwood.

Both sexes fairly common.

- (60.) *Papilio helenus*.

Common.

- (62.) *Papilio androgeus*.

Males common.

113. *Papilio sarpedon*, Linnæus.

Common. This species, as also *P. cloanthus*, Westwood, is particularly fond of imbibing moisture from damp spots on the ground, and will return to the same place however often disturbed.

114. *Papilio agamemnon*, Linnæus.

Common, but all the specimens much worn.

115. *Tagiades dasahara*, Moore.

Common. Always settles, like the rest of the genus, with wings wide outspread.

116. *Pterygospidea menaka*, Moore.

One specimen. Also settles with outspread wings.

117. *Ismene bengaminii*, Guérin.

Two specimens.

118. *Ismene amara*, Moore.

One specimen. The species of this genus as far as I know always settle with closed wings.

119. *Hesperilla* (? *Halpe*) *luteisquama*, Mabille.

One male.

120. *Pamphila* (? *Halpe*) *zema*, Hewitson.

Common, settled on moist spots.

121. *Pamphila augias*, Linnæus.

One male.

122. *Pamphila mæsa*, Moore.

One specimen.

123. *Pamphila gola*, Moore.

One specimen.

- (72.) *Hesperia eltola*.

Common.

124. *Hesperia chaya*, Moore.

Common. This is the widest spread and commonest *Hesperia* in North India, met with everywhere from the plains to 8,000 feet elevation.

125. *Hesperia* ? *semamora*, Moore.

One specimen. A new species to the Museum collection.

126. *Astictopterus diocles*, Moore.

The commonest *Hesperia* seen. Settles with closed wings.

127. *Plesioneura sumitra*, Moore.

One specimen. Always settles with expanded wings, is very swift on the wing, and has the habit of executing an aerial patrol up and down a small space.

128. *Plesioneura alysos*, Moore.

Common, both sexes taken, and all with one subapical white spot on fore-wing. It has the same habits as the preceding.

129. *Nisionades salsala*, Moore.

One specimen. It is common in shady places amongst trees on the outskirts of Calcutta, and always settles with closed wings.

The above 129 species of Butterflies were all taken under disadvantages. There was but little sun during the five days I collected, and I was obliged to cover a large extent of ground each day, so had no time to pause long in likely localities, having literally to catch as I walked. I only mention this to show what can be done in Sikkim in the way of collecting and how exceeding rich it is in *Rhopalocera*, could I have stopped longer in each place I should probably and without exaggeration have collected at least double the number of species here recorded.